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APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/417,705	10/13/1999		JUNYA KAKU	991142	7820
23850	7590	04/21/2005		EXAMINER	
ARMSTRO	NG, KR	ATZ, QUINTOS,	NGUYEN, LUONG TRUNG		
1725 K STR SUITE 1000				ART UNIT	PAPER NUMBER
WASHING		20006		2612	

DATE MAILED: 04/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

•		ll,
	Application No.	Applicant(s)
	09/417,705	KAKU, JUNYA
Office Action Summary	Examiner	Art Unit
	LUONG T NGUYEN	2612
The MAILING DATE of this communication appeared for Reply	pears on the cover sheet with the c	orrespondence address
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a rep If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply be tin ly within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).
Status		
 Responsive to communication(s) filed on 30 N This action is FINAL. Since this application is in condition for allowated closed in accordance with the practice under R 	s action is non-final. ince except for formal matters, pro	
Disposition of Claims		
4) ☐ Claim(s) 10 and 13-15 is/are pending in the ap 4a) Of the above claim(s) is/are withdra 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 10 and 13-15 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	wn from consideration.	
Application Papers		
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) accomposed and applicant may not request that any objection to the Replacement drawing sheet(s) including the correct of the one of t	epted or b) objected to by the liderawing(s) be held in abeyance. See tion is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Burea * See the attached detailed Office action for a list	ts have been received. ts have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage
Attachment(s)		
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 12/03/04. 	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	

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DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 10, 13-14 and newly added claim 15, filed on 11/03/2004 have been considered but are most in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 10, 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishikawa (US 6,661,452) in view of Hirabyashi et al. (US 6,295,596) further in view of Kanai et al. (US 5,835,164).

Regarding claims 10, 13, Nishikawa discloses a digital camera, comprising:

an imaging device for outputting at a rate of one screen per a first period a first image signal of a first resolution which corresponds to an optical image of an object scene (CCD 12 outputs a first signal of a first resolution 1280x960 pixels, Figure 1, Column 3, Lines 3-13);

a creator (combination of signal processing 24 and thinning-out circuit 26, Figure 1, Column 4, Lines 57-67) for creating a second image signal of a second resolution (YUV data

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outputted from thinning-out circuit 26 has resolution 640x240 pixels, Figure 1, Column 4, Lines 57-67) lower than the first resolution by subjecting the first image signal outputted from said imaging device to a signal processing including a thinning-out process;

a memory (SDRAM 58, Figure 1, Column 4, Lines 30-40) having a single input/output port and a plurality of memory areas;

a writer for writing the second image signal created by said creator to one of said plurality of memory areas (SDRAM control circuit 30, Figure 1, Column 4, Lines 30-56);

a displayer for displaying an image based on the second image signal read out by said reader (LCD 40, Figure 1, Column 5, Lines 25-27),

wherein said memory is an SDRAM (SDRAM 58, Figure 1, Column 4, Lines 30-40), and said writer includes a buffer (buffer 32, Figure 1, Column 3, Lines 52-67) for holding the second image signal created by said creator and a transferor (bus 60, Figure 1, Column 4, Lines 30-41) for transferring the second image signal held by said buffer to said memory.

Nishikawa fails to specifically disclose a changer for changing a selecting a memory area at an interval of the first period; a writer for writing the second image signal created by said creator to one of said plurality of memory areas based on a changing result of said changer; and a reader for reading the image signal from another of said plurality of memory areas based on the changing result of said changer. However, Hirabayashi et al. disclose memory 11 (SDRAM) has two banks A and B, the data can be written and read out, independently of each other, these banks can be switched (figure 1, column 4, line 63 – column 5, line 3). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the

device in Hayashi by the teaching of Hirabayashi et al. in order to obtain a device in which data can be read out fast by switching the banks (column 6, lines 29-30).

Nishikawa and Hirabyashi et al. fail to specifically disclose a reader for reading the image signal from another of said plurality of memory areas based on the changing result of said changer at a rate of one screen per a second period which is one over an integer of the first period. However, Kanai et al. teach a video signal processor, which comprises a memory, in which the digital data being written into the memory at a first rate based on a writing control clock and being read from the memory at a second rate, which is n times the first rate, n is an integer greater than one (see abstract, column 57, lines 29-38). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Hayashi and Hirabayashi et al. by the teaching of Kanai et al. in order to reduce flicker (see abstract).

Regarding claim 14, Hirabayashi et al. disclose the changer changes the selecting of the memory area in a predetermined order (column 6, line 64 – column 7, line 40).

As for claim 15, all the limitation are contained in claim 10, therefore, see examiner's comments regarding claim 10.

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Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LUONG T NGUYEN whose telephone number is (571) 272 - 7315. The examiner can normally be reached on 7:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on (571) 272 - 7308. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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